

FIG.1

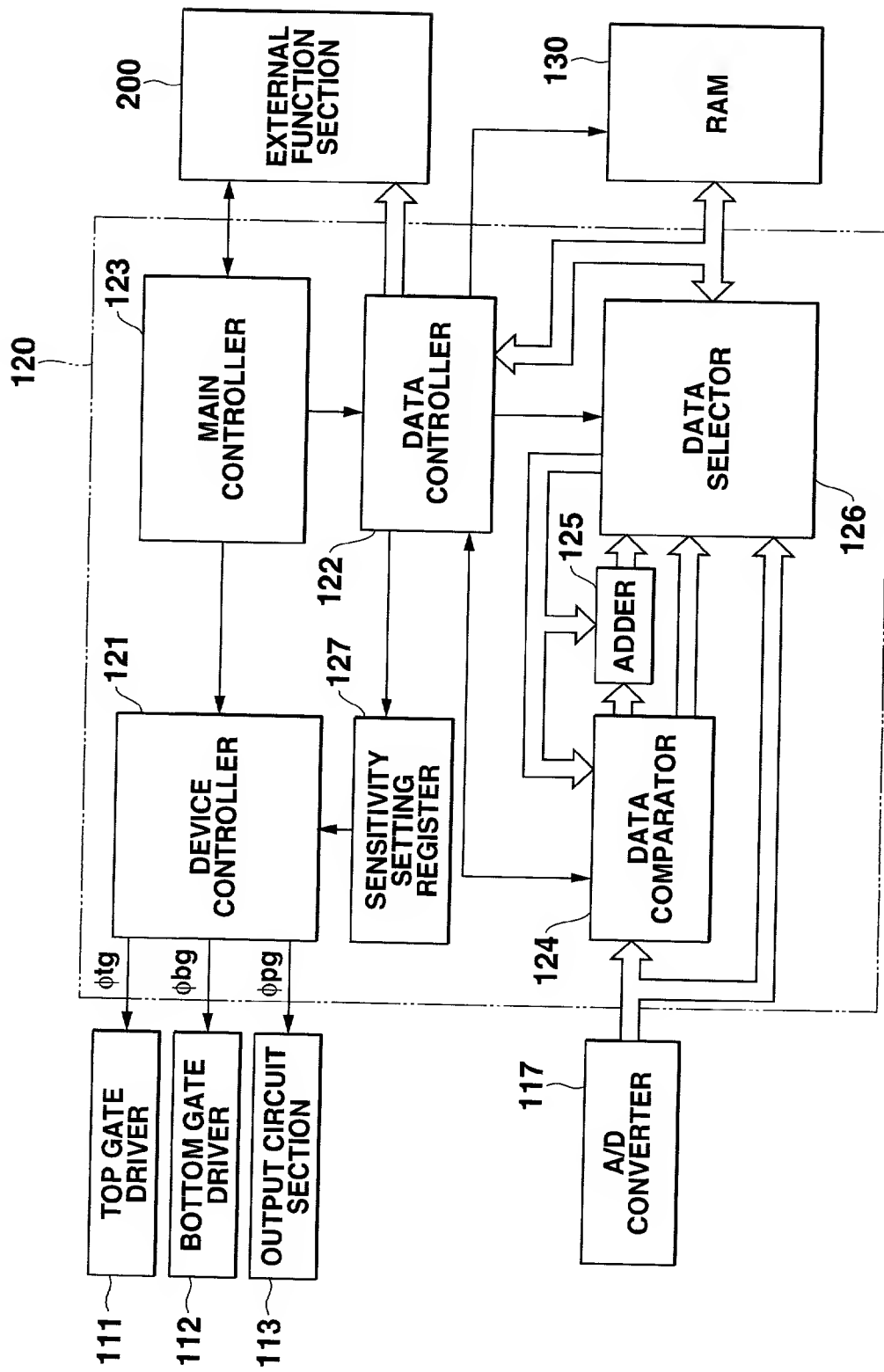


FIG. 2

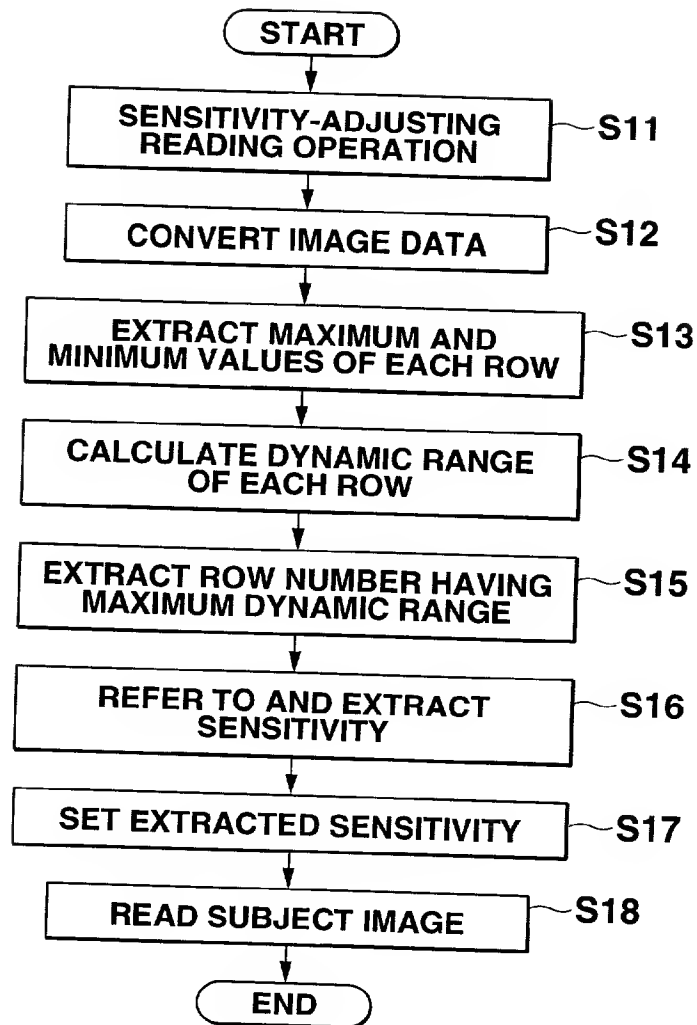


FIG.3

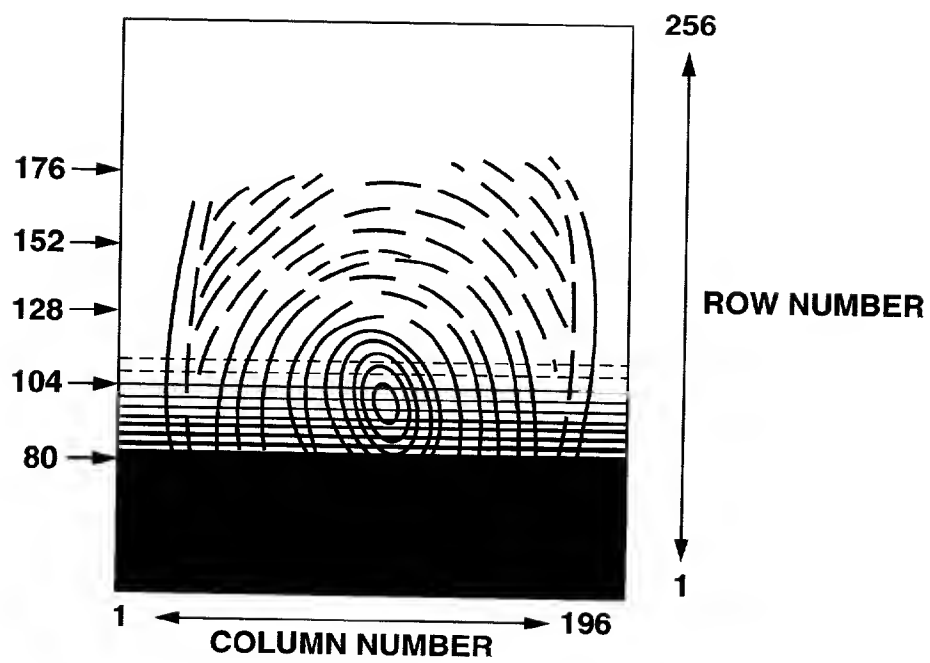


FIG.4

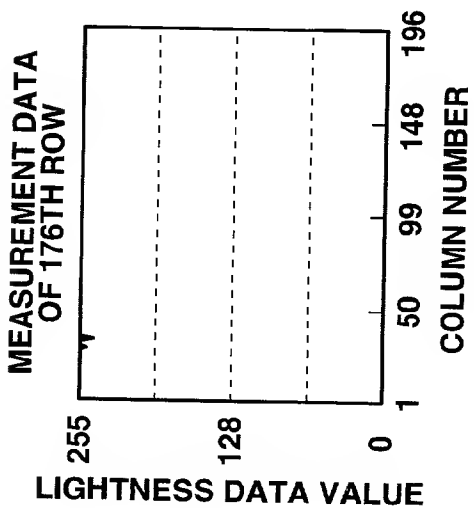


FIG. 5A

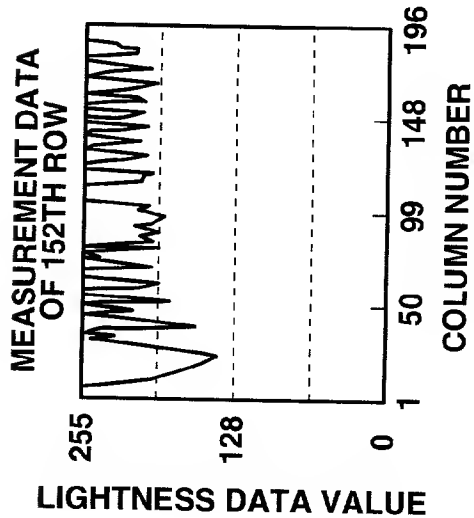


FIG. 5B

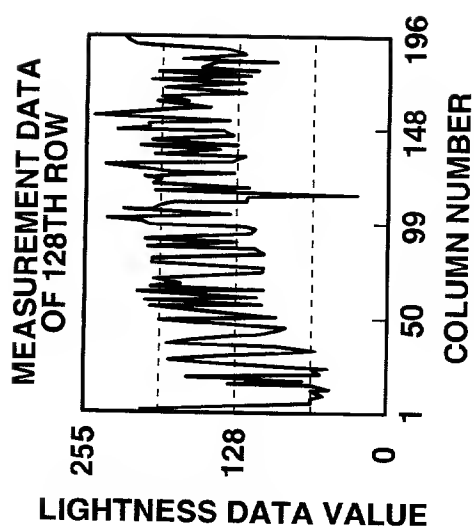


FIG. 5C

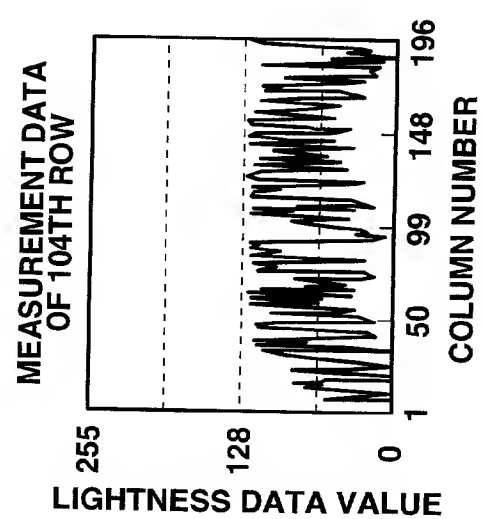


FIG. 5D

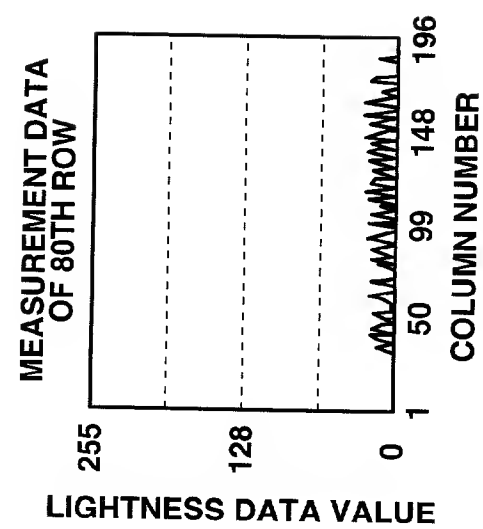


FIG. 5E

FIG.6A

ROW NUMBER	80TH ROW	104TH ROW	128TH ROW	152ND ROW	176TH ROW
MAXIMUM VALUE	25	127	251	255	255
MINIMUM VALUE	0	0	27	153	249
DYNAMIC RANGE	25	127	224	102	6



FIG.6B

ROW NUMBER	1ST ROW	. . .	128TH ROW	. . .	256TH ROW
CHARGE ACCUMULATING PERIOD	T ₁	. . .	T ₁₂₈	. . .	T ₂₅₆

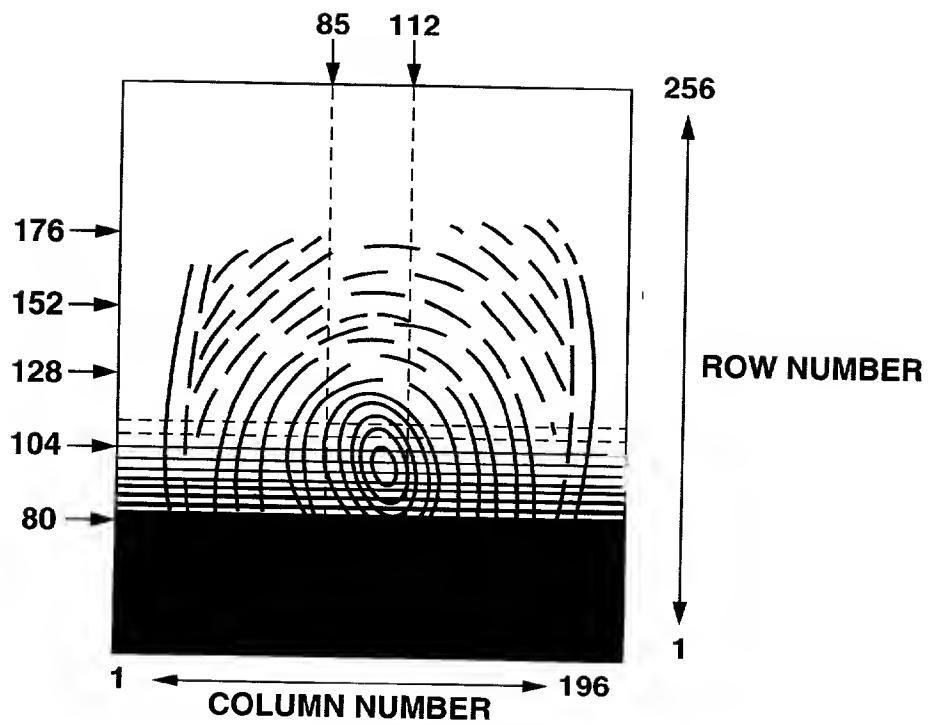


FIG.7

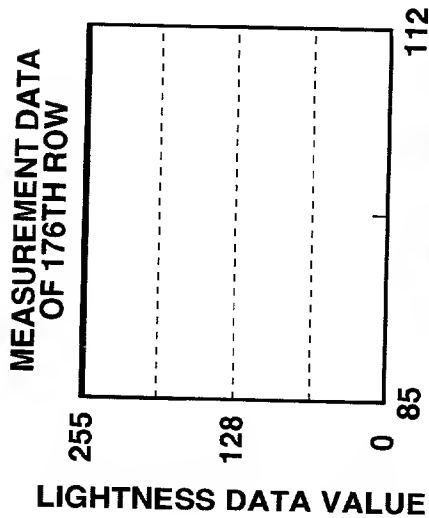


FIG. 8A

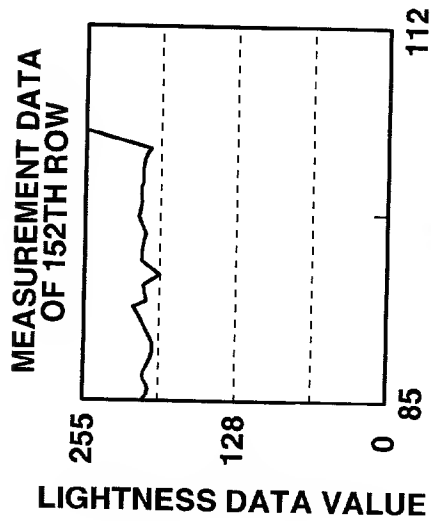


FIG. 8B

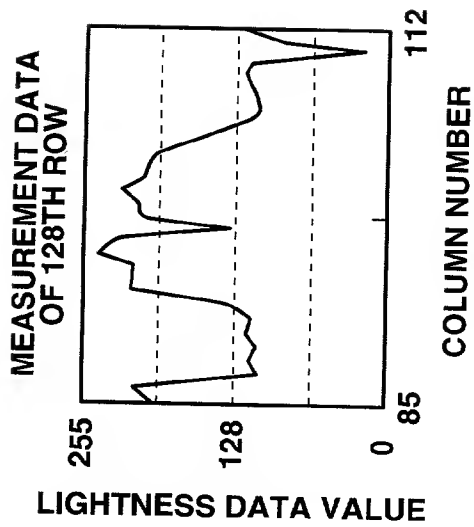


FIG. 8C

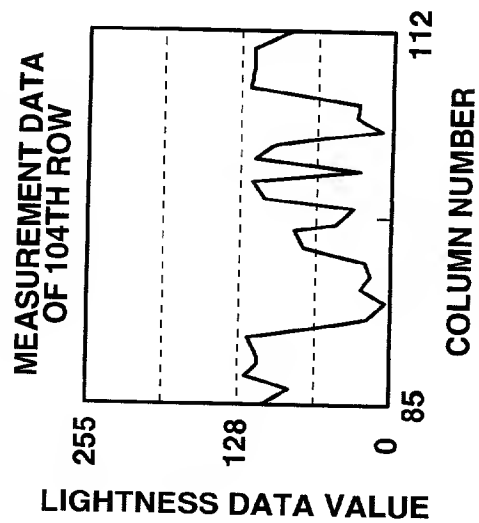


FIG. 8D

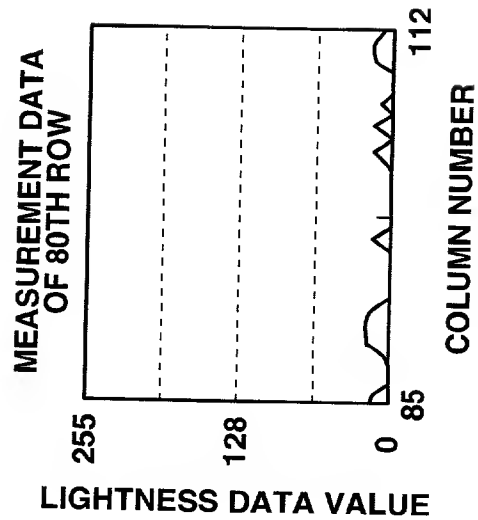


FIG. 8E

FIG.9A

ROW NUMBER	80TH ROW	104TH ROW	128TH ROW	152ND ROW	176TH ROW
MAXIMUM VALUE	23	117	243	255	255
MINIMUM VALUE	0	9	27	193	255
DYNAMIC RANGE	23	108	216	62	0



FIG.9B

ROW NUMBER	1ST ROW	. . .	128TH ROW	. . .	256TH ROW
CHARGE ACCUMULATING PERIOD	T ₁	. . .	T ₁₂₈	. . .	T ₂₅₆

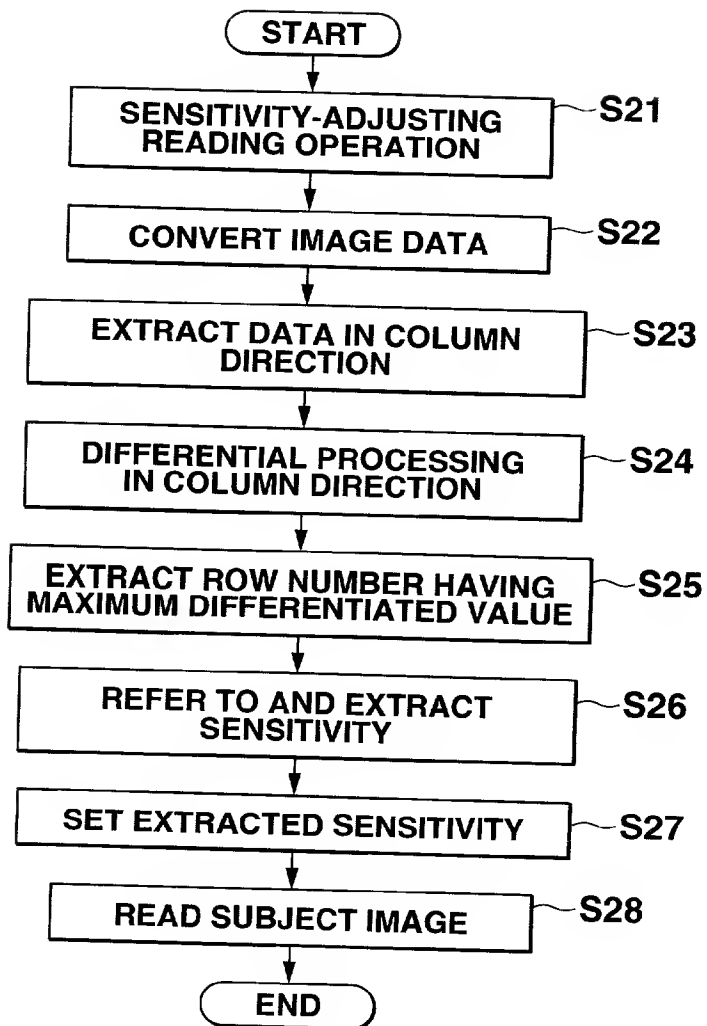


FIG.10

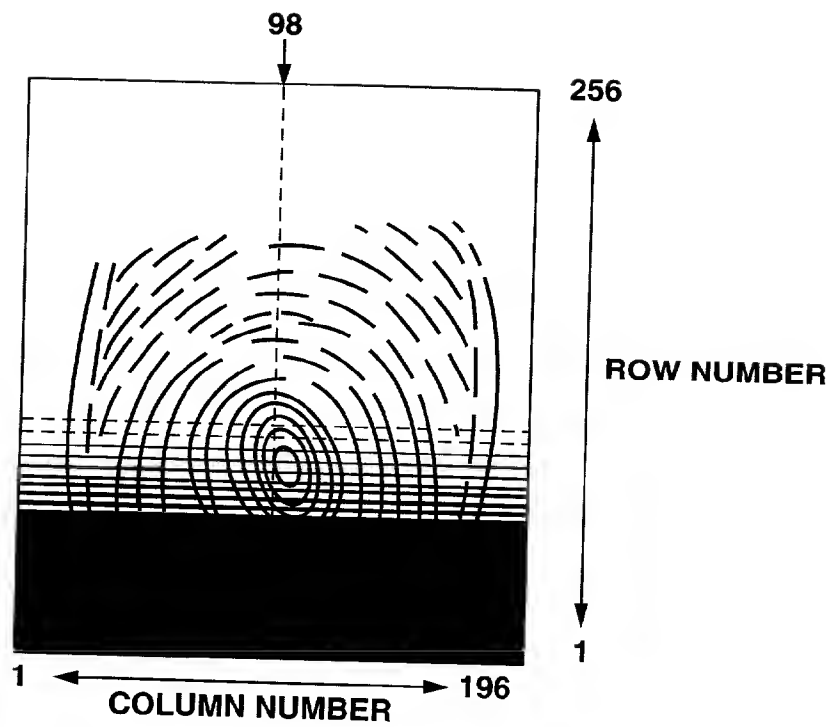


FIG.11

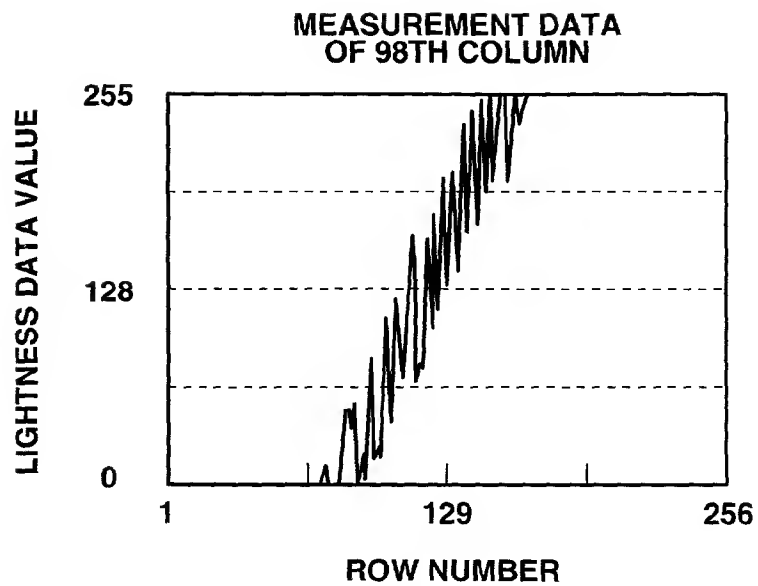


FIG.12A

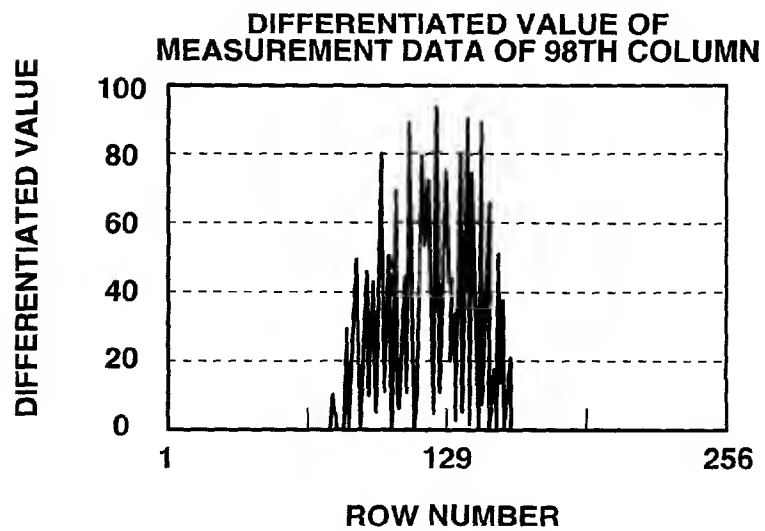


FIG.12B

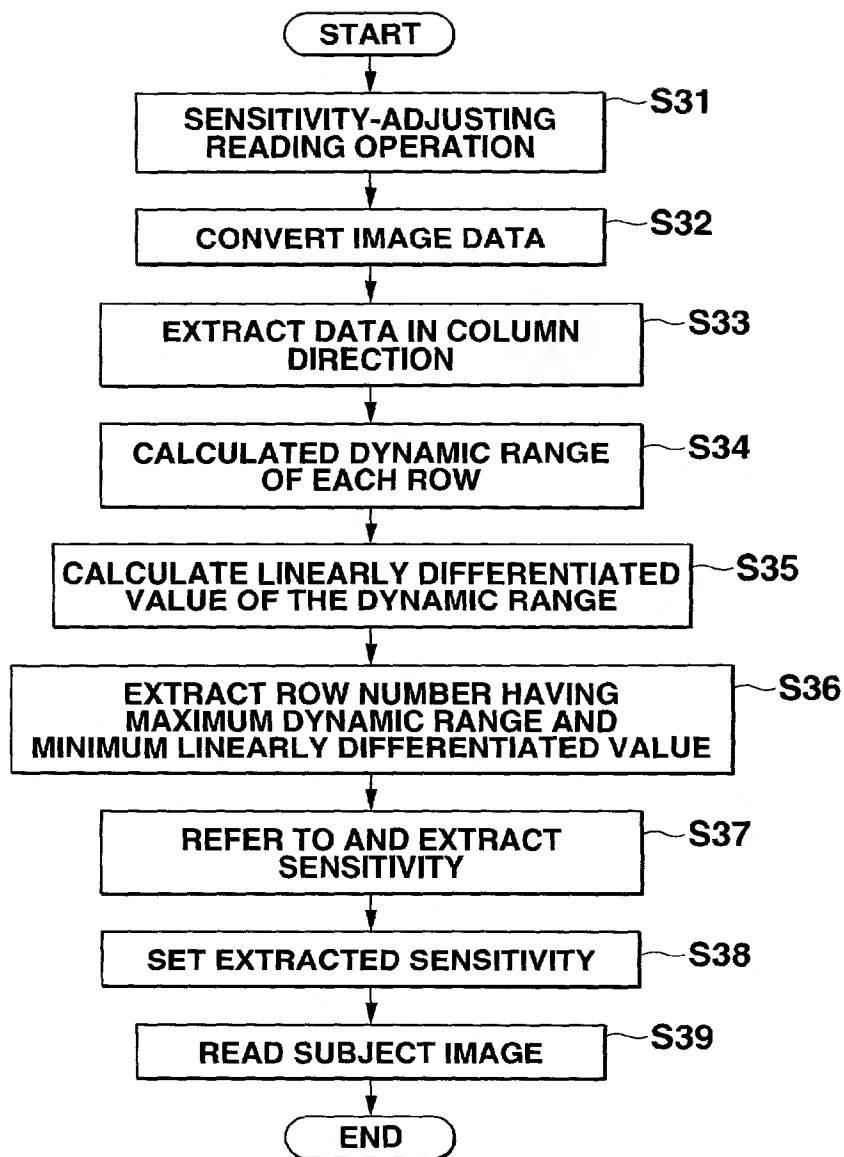


FIG.14

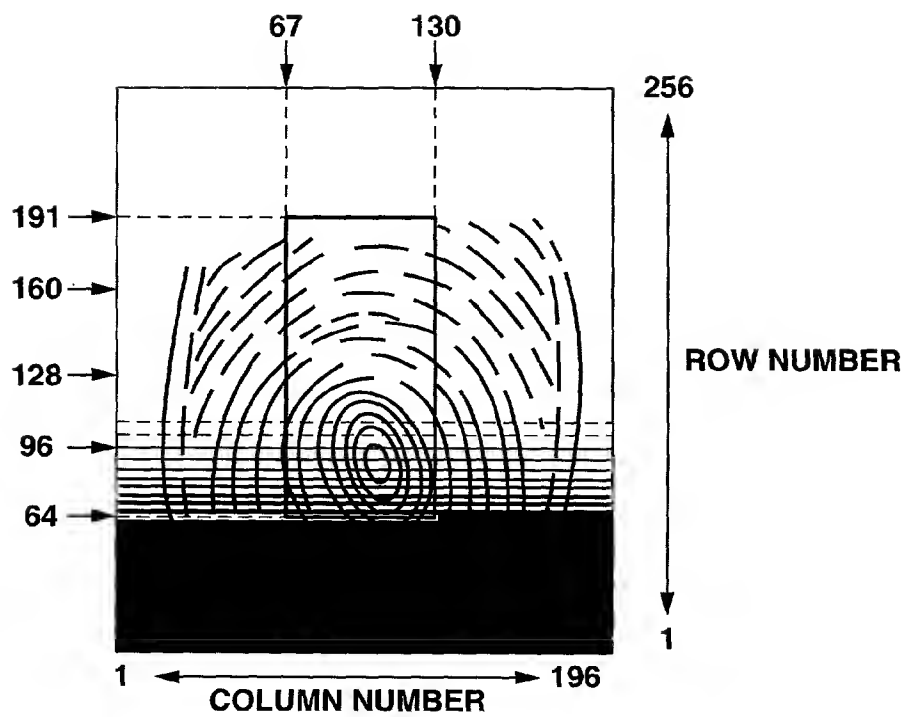


FIG.15

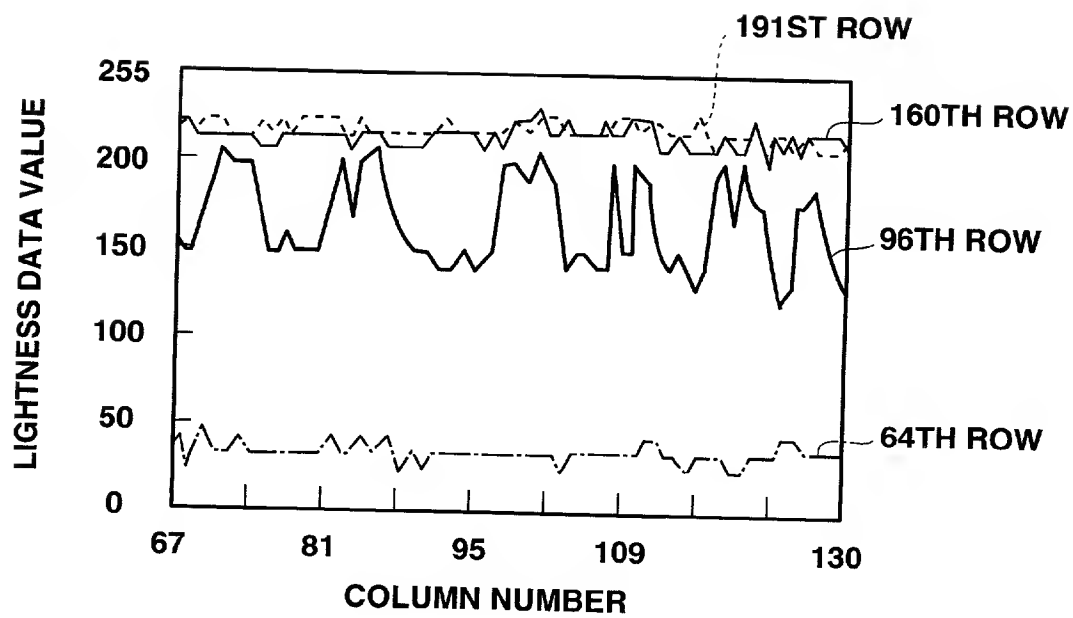


FIG.16

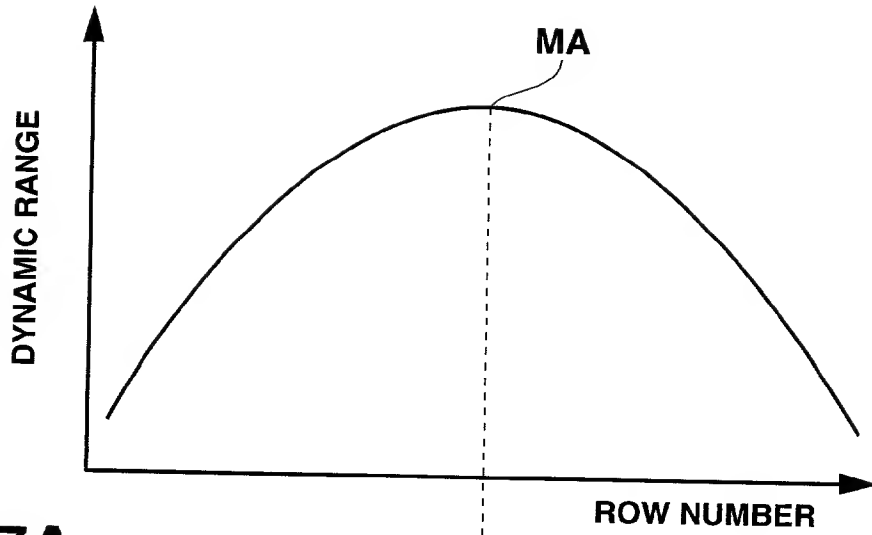


FIG.17A

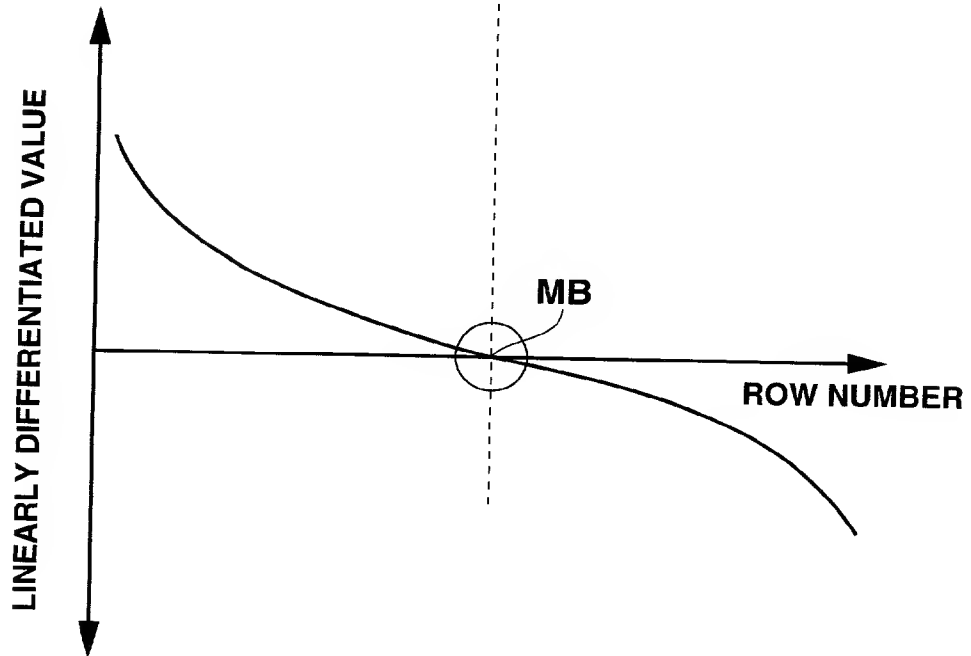
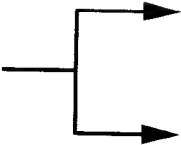


FIG.17B

ROW NUMBER	64TH ROW	. . .	Lk-1 ROW	Lk ROW	Lk+1 ROW	. . .	191ST ROW
MAXIMUM VALUE	X64	. . .	XK-1	XK	XK+1	. . .	X191
MINIMUM VALUE	Y64	. . .	YK-1	YK	YK+1	. . .	Y191
DYNAMIC RANGE	R64	. . .	RK-1	RK(MAX)	RK+1	. . .	R191
LINEARLY DIFFERENTIATED VALUE	. . .		Dk-2	Dk-1(MIN)	Dk	Dk+1	. . .

FIG.18A



ROW NUMBER	64TH ROW	. . .	Lk-1 ROW	Lk ROW	Lk+1 ROW	. . .	191ST ROW
CHARGE ACCUMULATING PERIOD	T64	. . .	Tk-1	Tk	Tk+1	. . .	T191

FIG.18B

FIG. 19A is a schematic diagram of a memory array. The array is organized into rows and columns. The rows are labeled 64TH ROW, X64, Y64, and R64. The columns are labeled Lk-1 ROW, Lk ROW, Lk+1 ROW, and 191ST ROW. The array is divided into three sections: MAXIMUM VALUE, MINIMUM VALUE, and DYNAMIC RANGE. The MAXIMUM VALUE section contains the value X64. The MINIMUM VALUE section contains the value Y64. The DYNAMIC RANGE section contains the value R64. The array is also divided into three sections: Lk-1 ROW, Lk ROW, and Lk+1 ROW. The Lk-1 ROW section contains the value Xk-1. The Lk ROW section contains the value Yk. The Lk+1 ROW section contains the value Rk+1. The array is also divided into three sections: Xk-1, Yk, and Rk+1. The Xk-1 section contains the value Xk-1. The Yk section contains the value Yk. The Rk+1 section contains the value Rk+1. The array is also divided into three sections: Xk-1, Yk, and Rk+1. The Xk-1 section contains the value Xk-1. The Yk section contains the value Yk. The Rk+1 section contains the value Rk+1.

FIG.19A

ROW NUMBER	64TH ROW	. . .	Lk-1 ROW	Lk ROW	Lk+1 ROW	191ST ROW
MAXIMUM VALUE	X64	. . .	XK-1	XK	XK+1	X191
MINIMUM VALUE	Y64	. . .	YK-1	YK	YK+1	Y191
DYNAMIC RANGE	R64	. . .	RK-1	RK(MAX)	RK+1	R191



FIG.19B

ROW NUMBER	64TH ROW	. . .	Lk-1 ROW	Lk ROW	Lk+1 ROW	191ST ROW
CHARGE ACCUMULATING PERIOD	T64	. . .	TK-1	TK	TK+1	T191

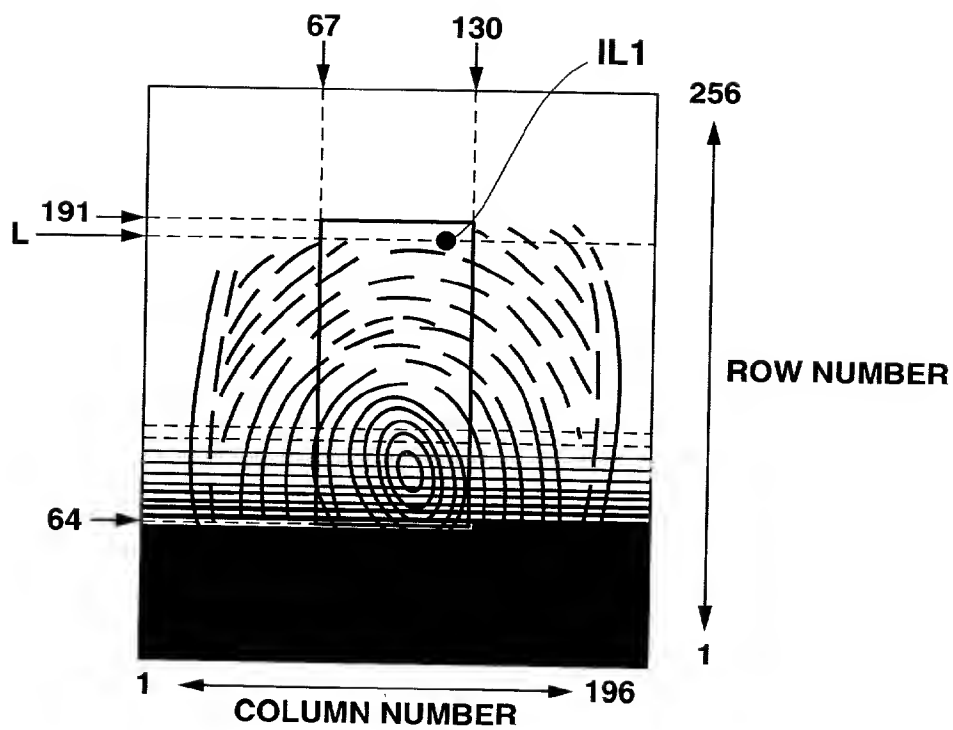


FIG.20

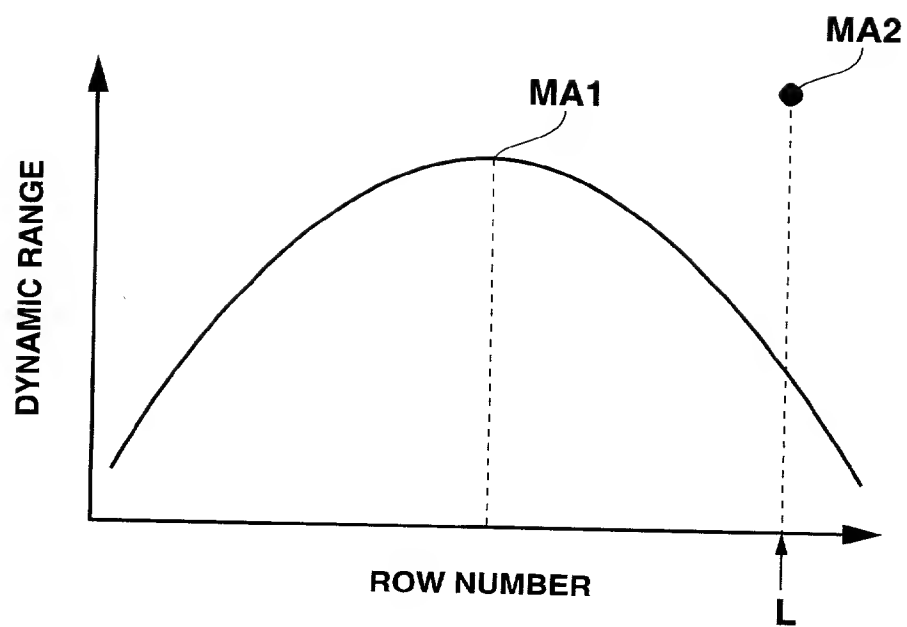


FIG.21

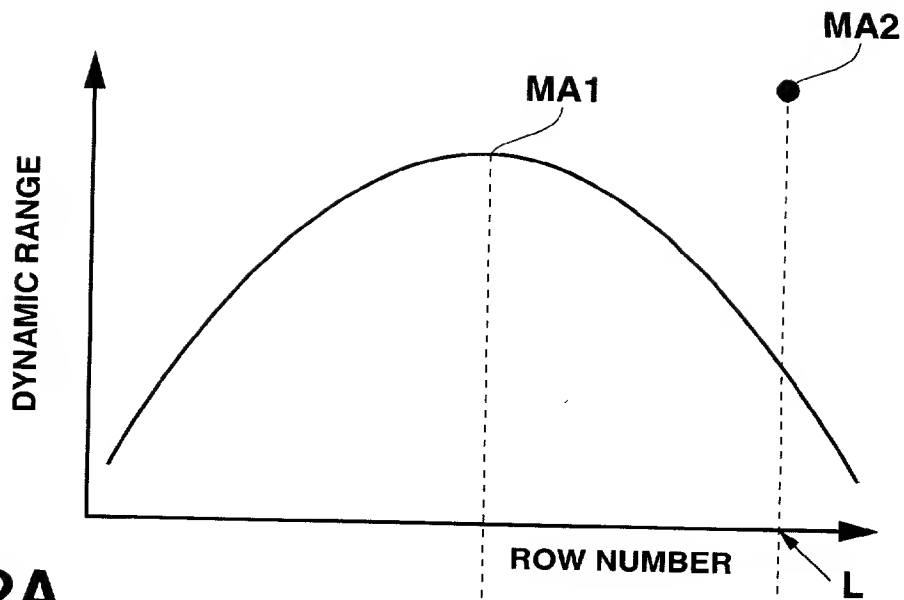


FIG. 22A

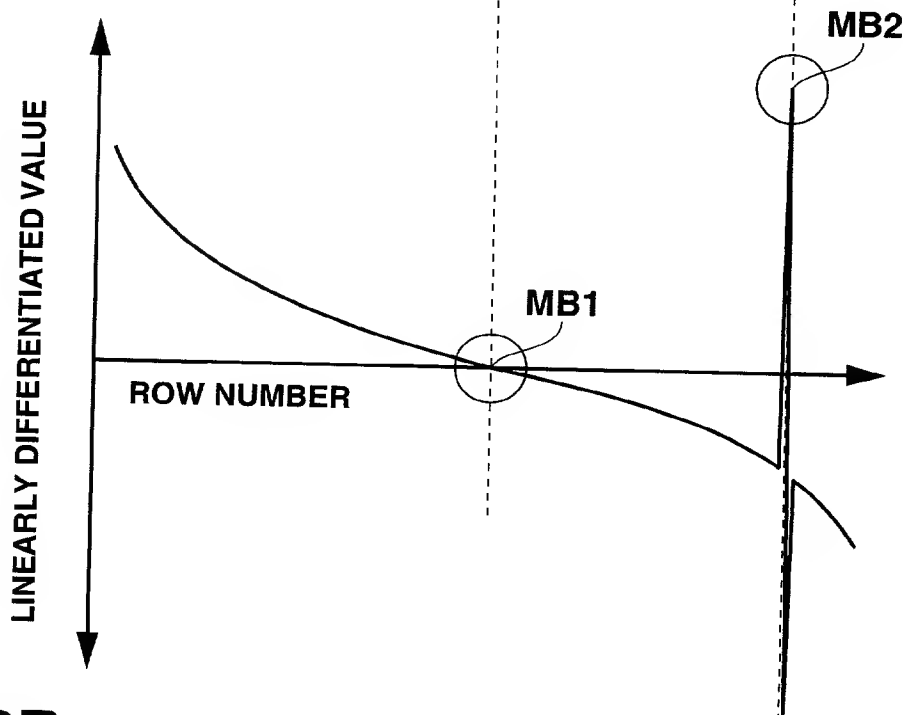


FIG. 22B

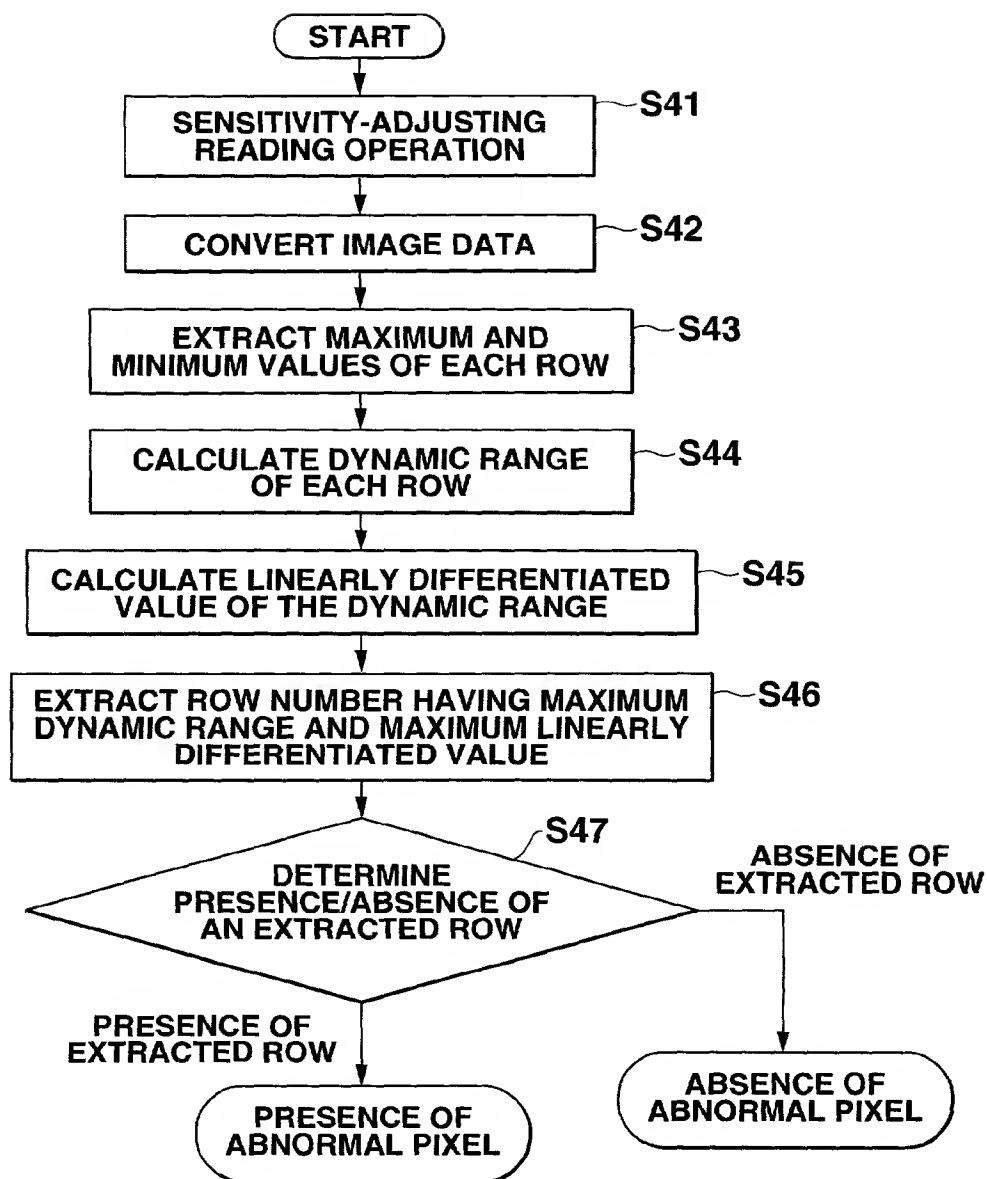


FIG.23

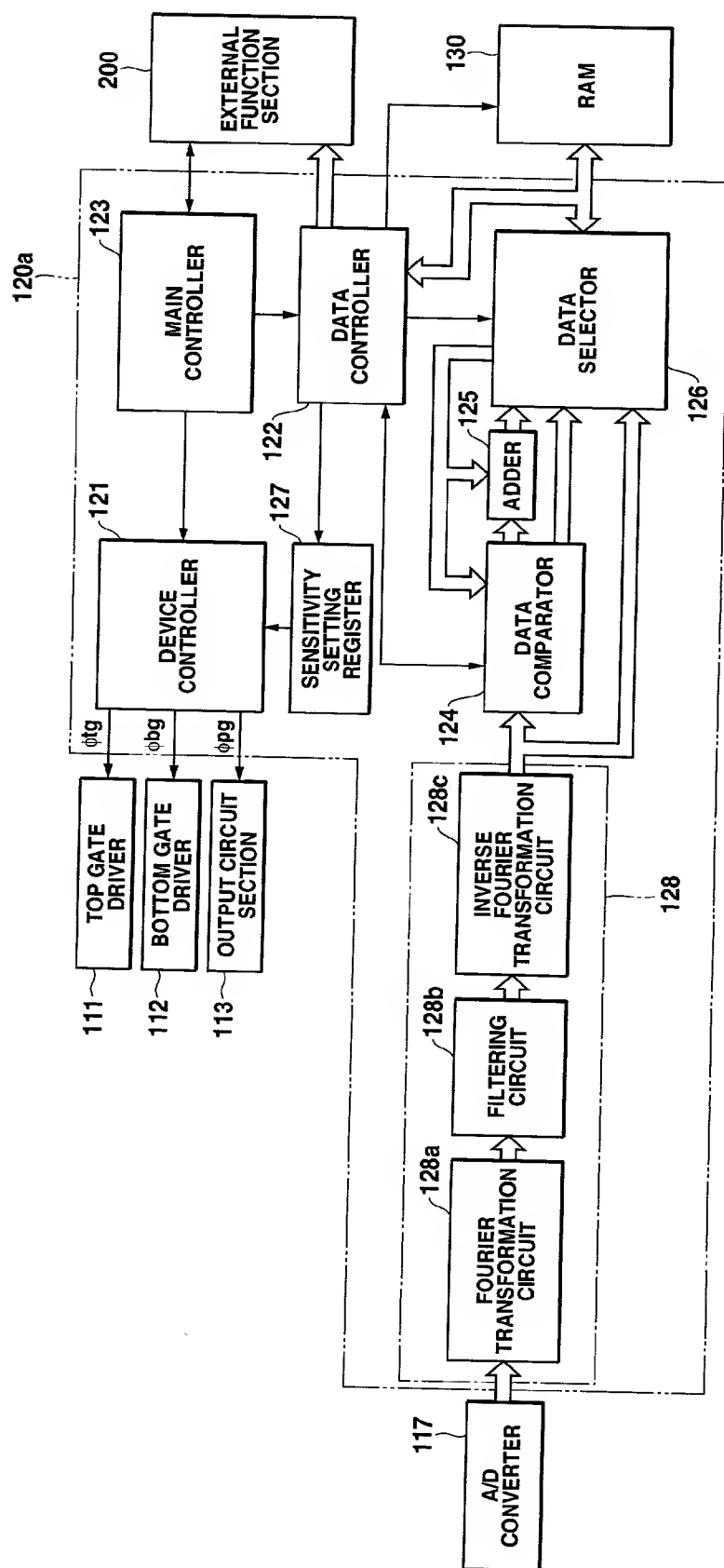


FIG. 24

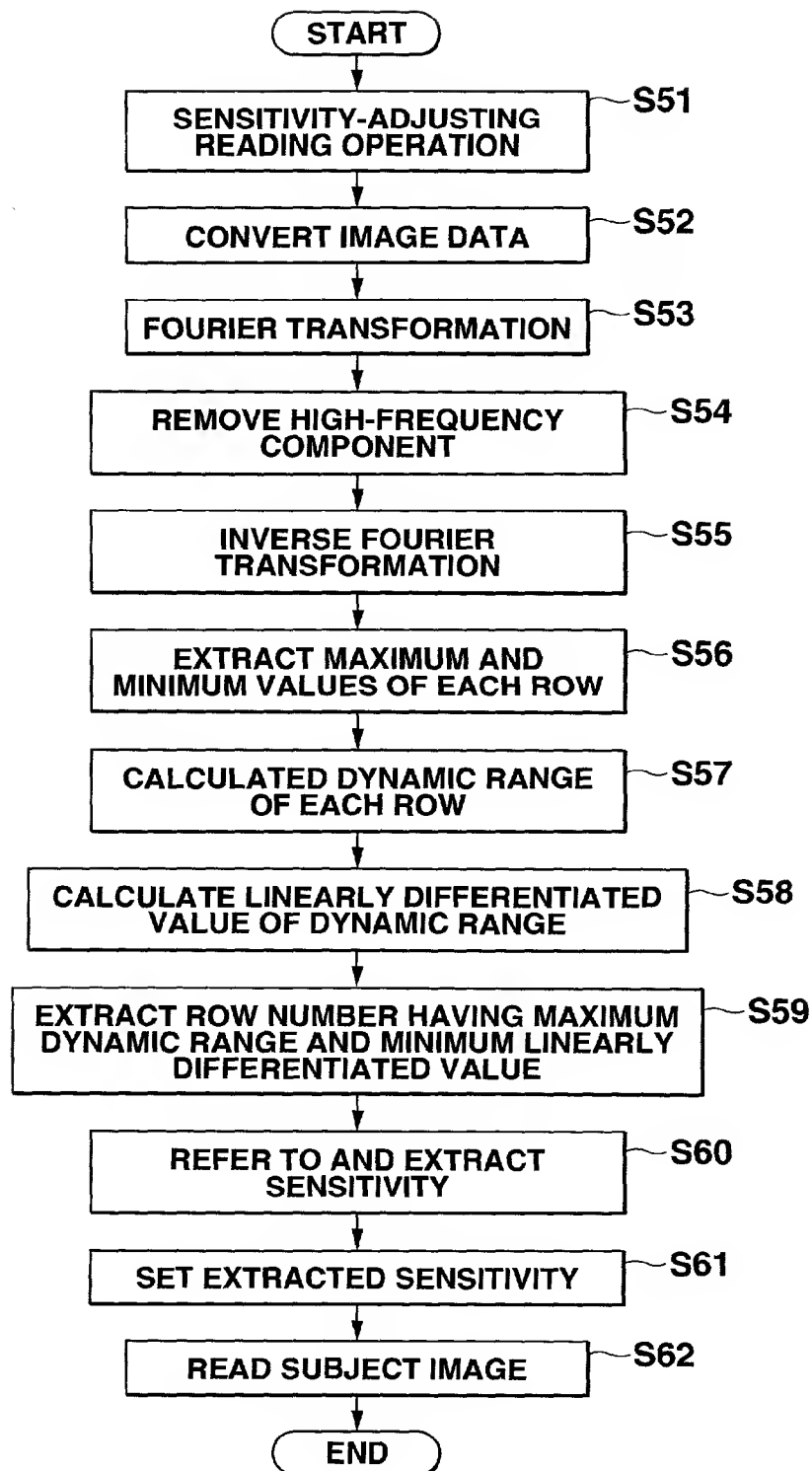


FIG.25

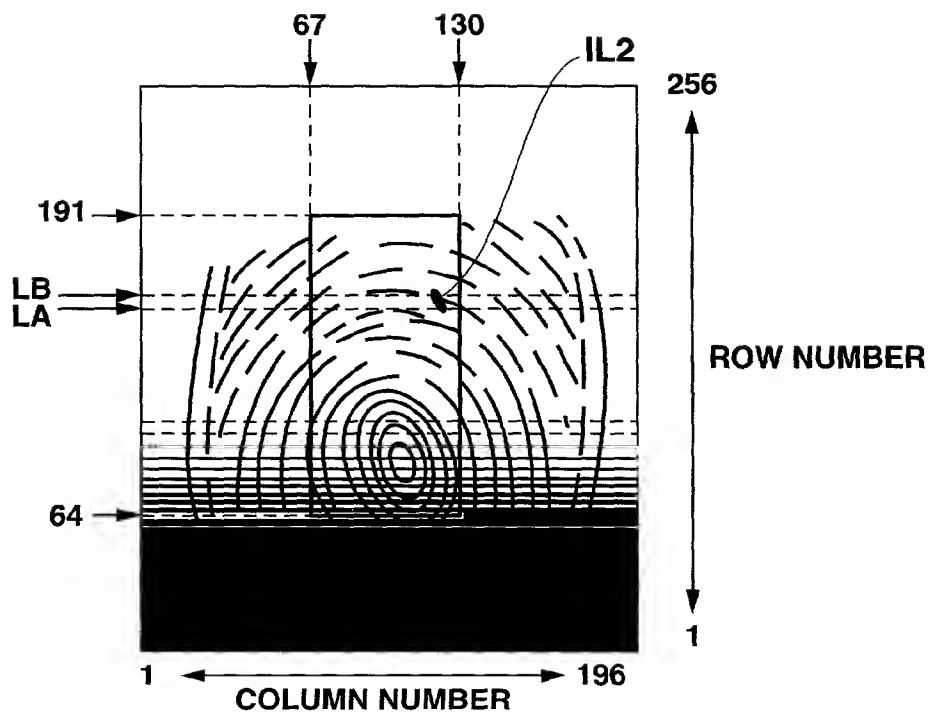


FIG.26

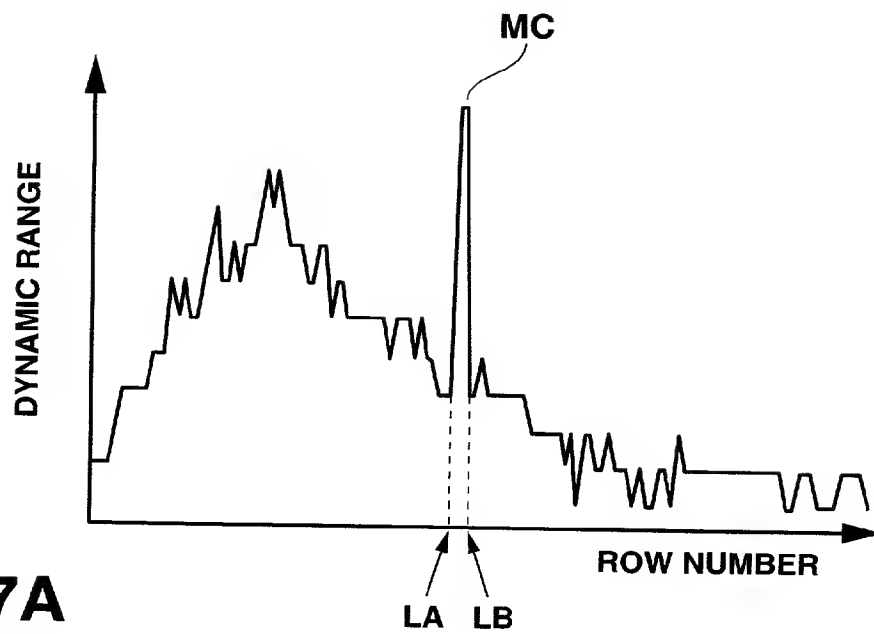


FIG.27A

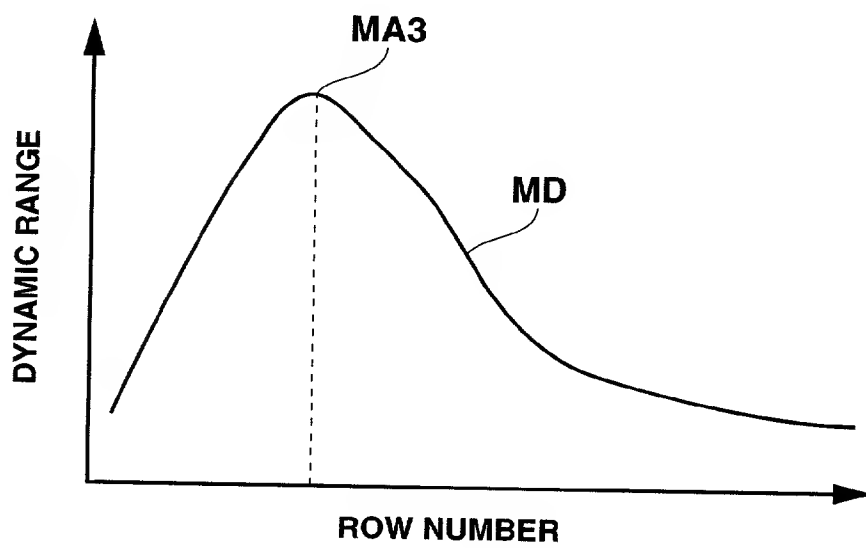


FIG.27B

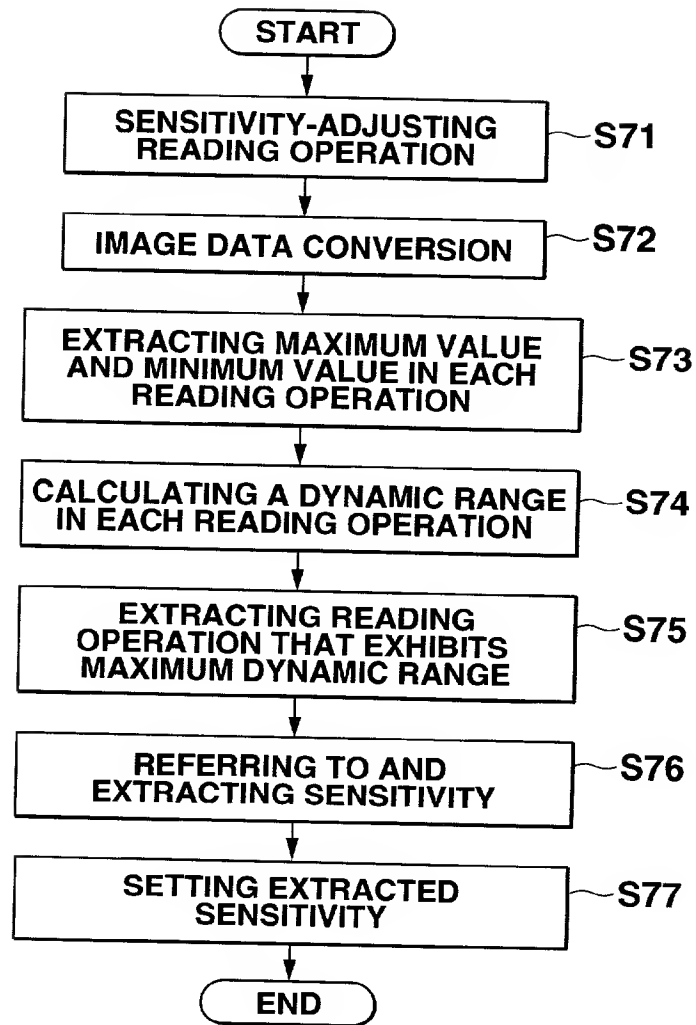


FIG.28

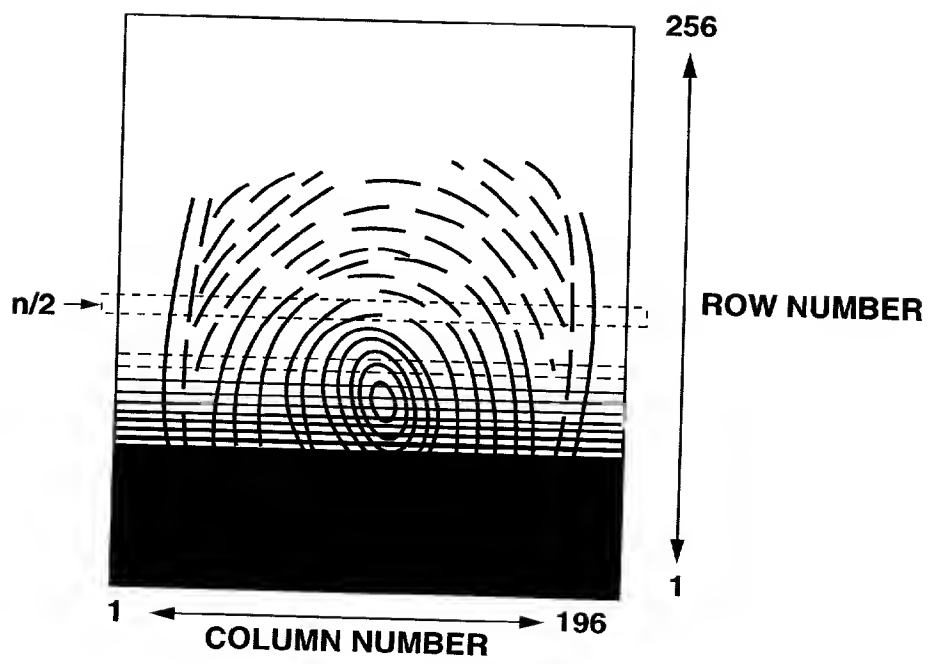
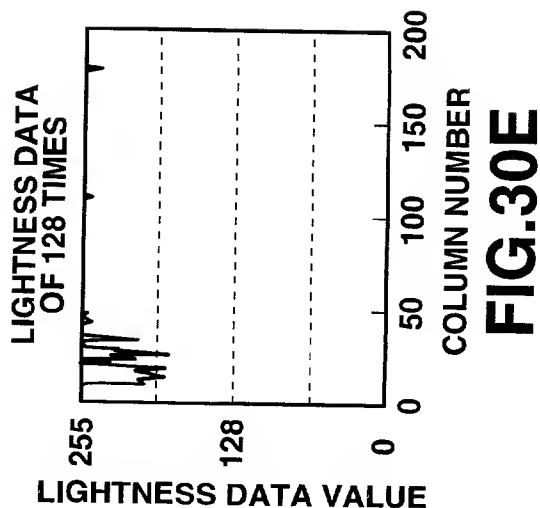
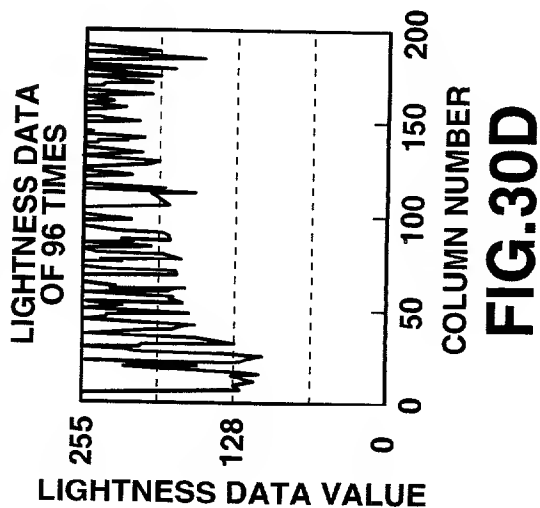
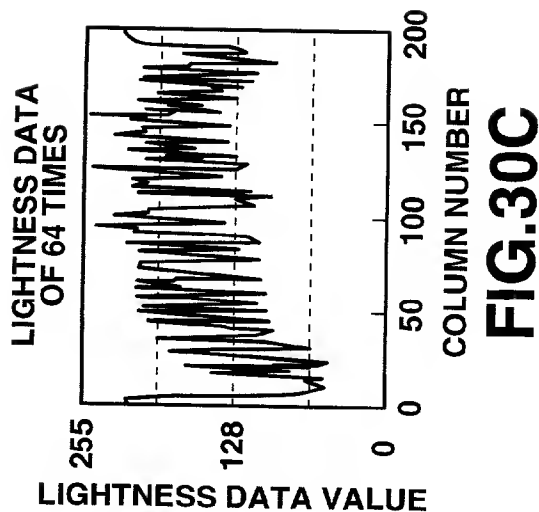
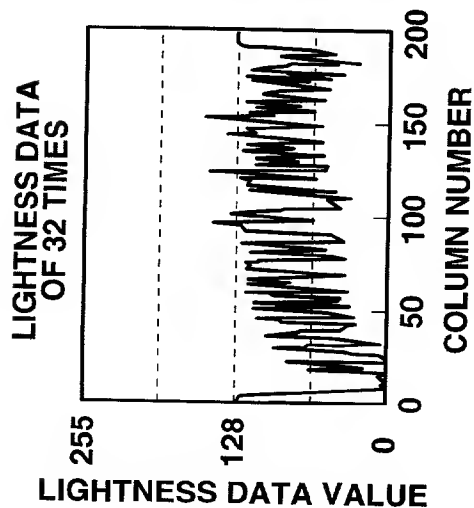
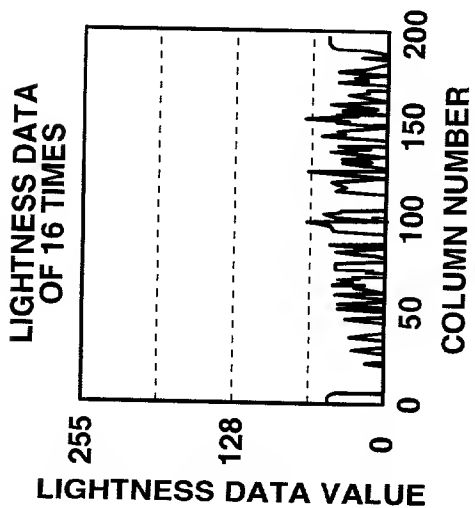


FIG.29



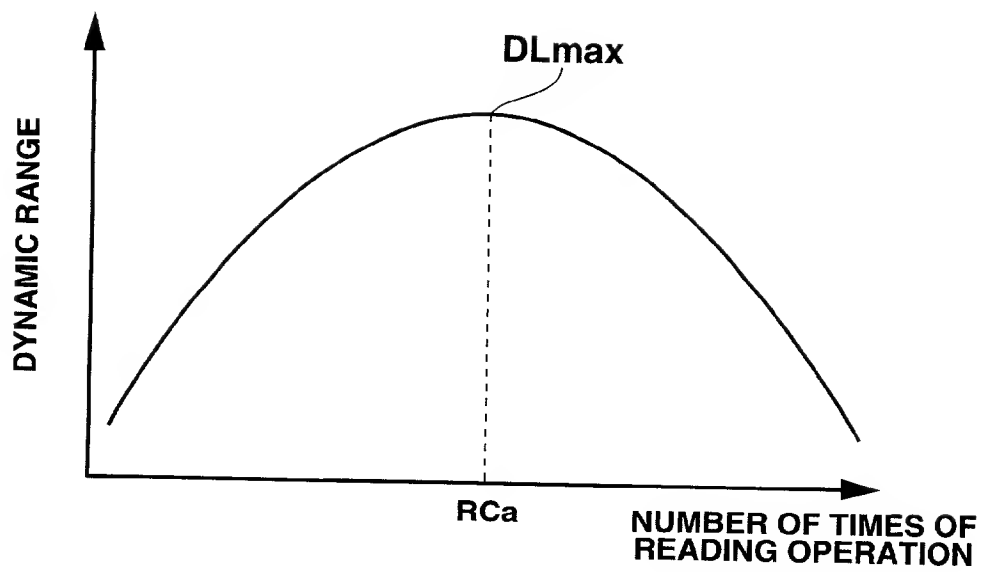


FIG.31

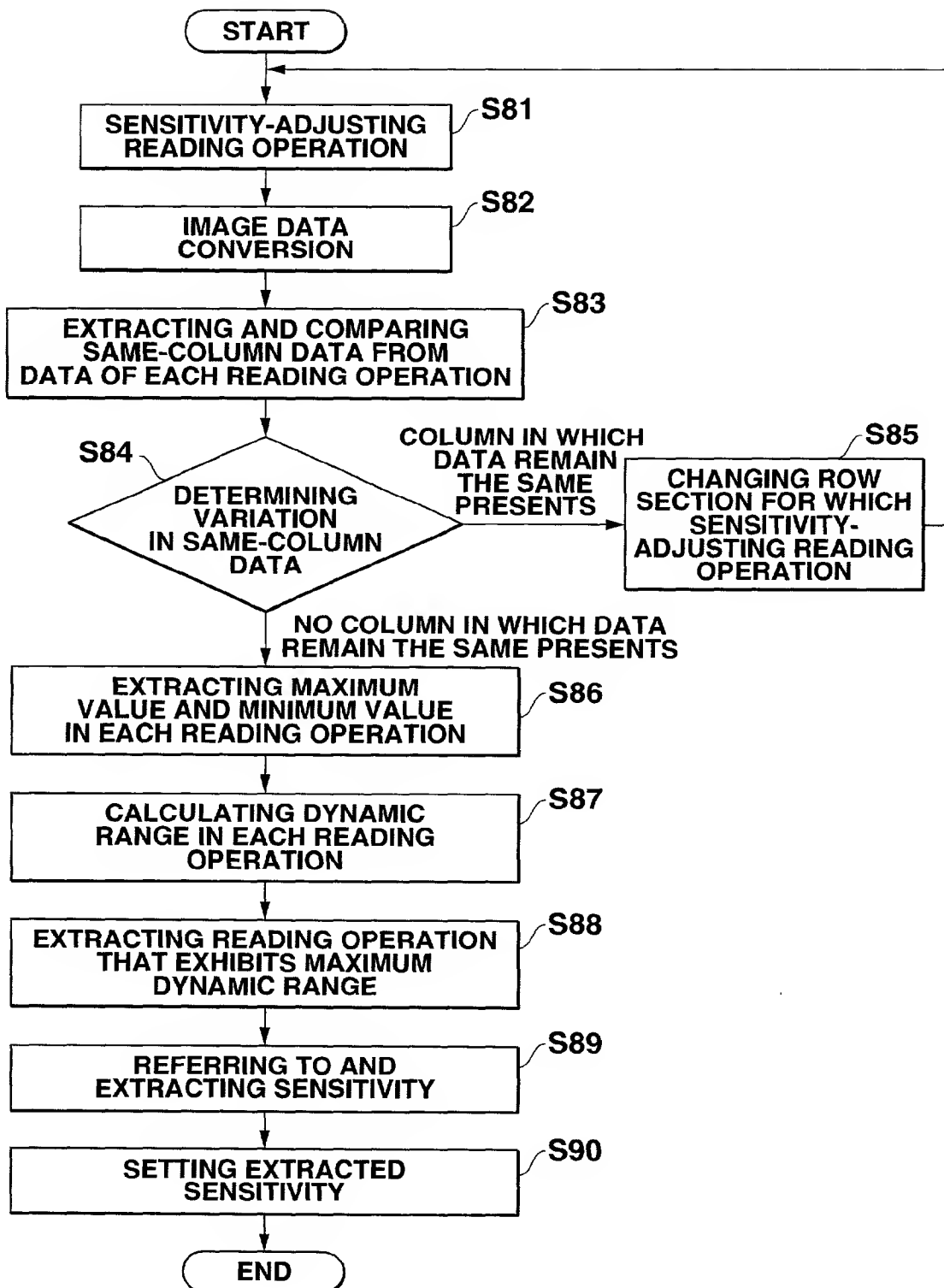


FIG.32

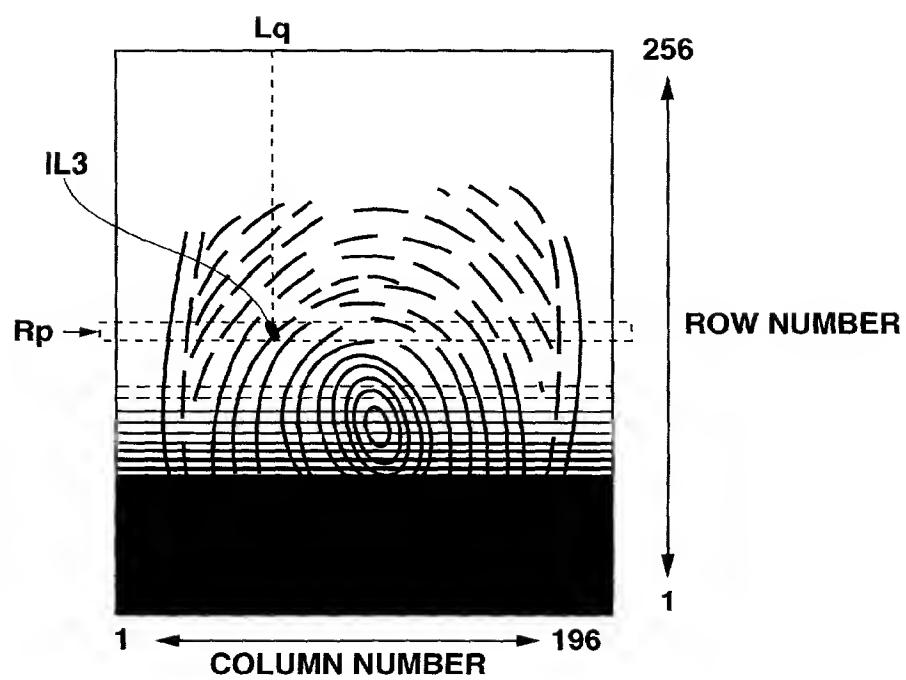
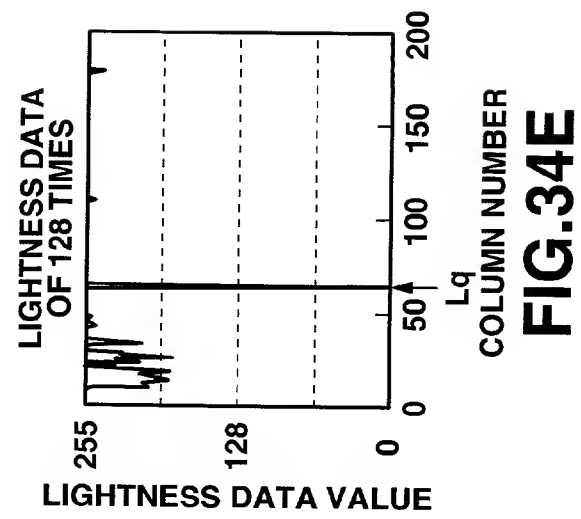
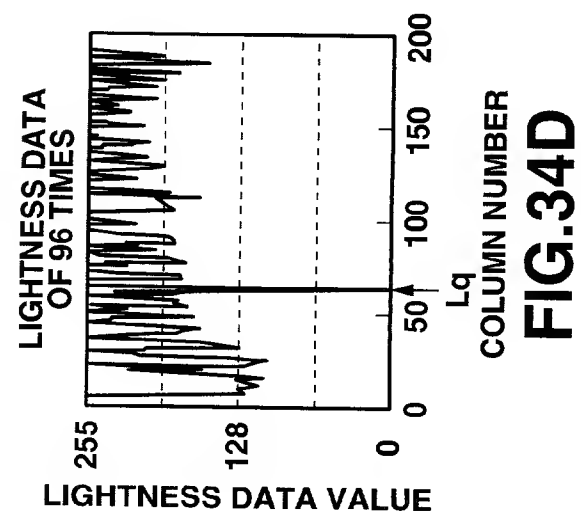
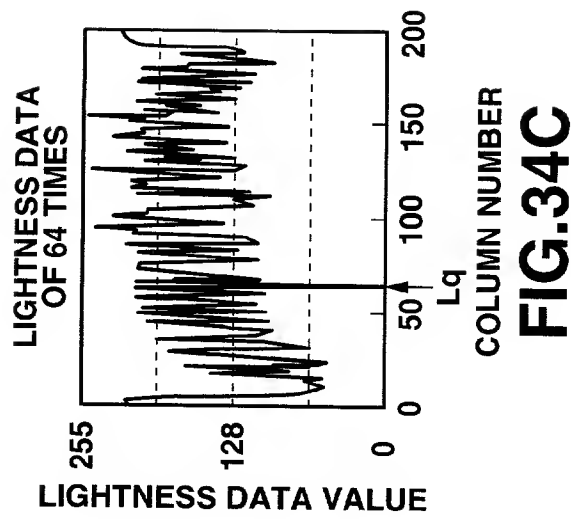
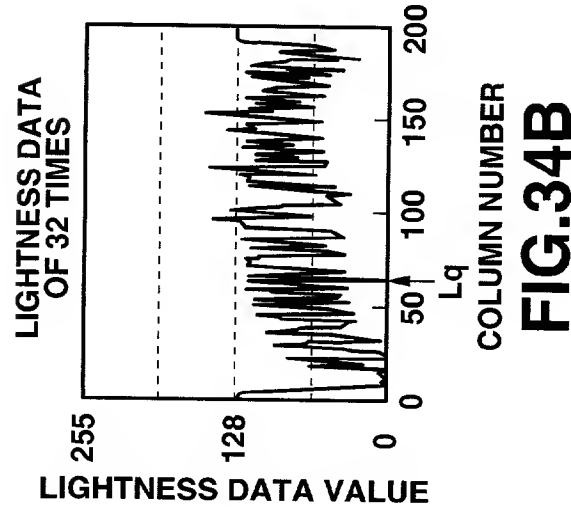
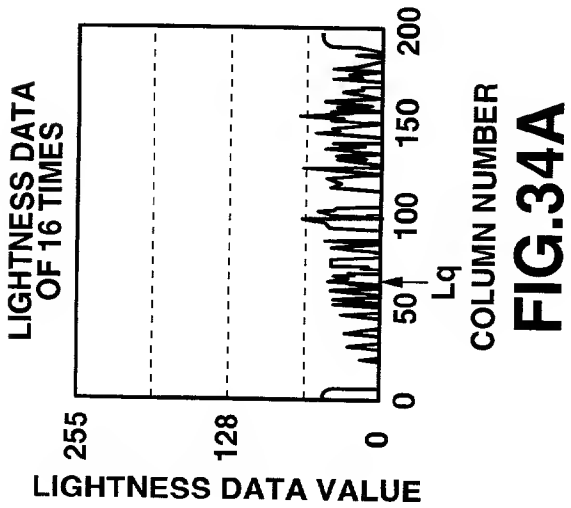


FIG.33



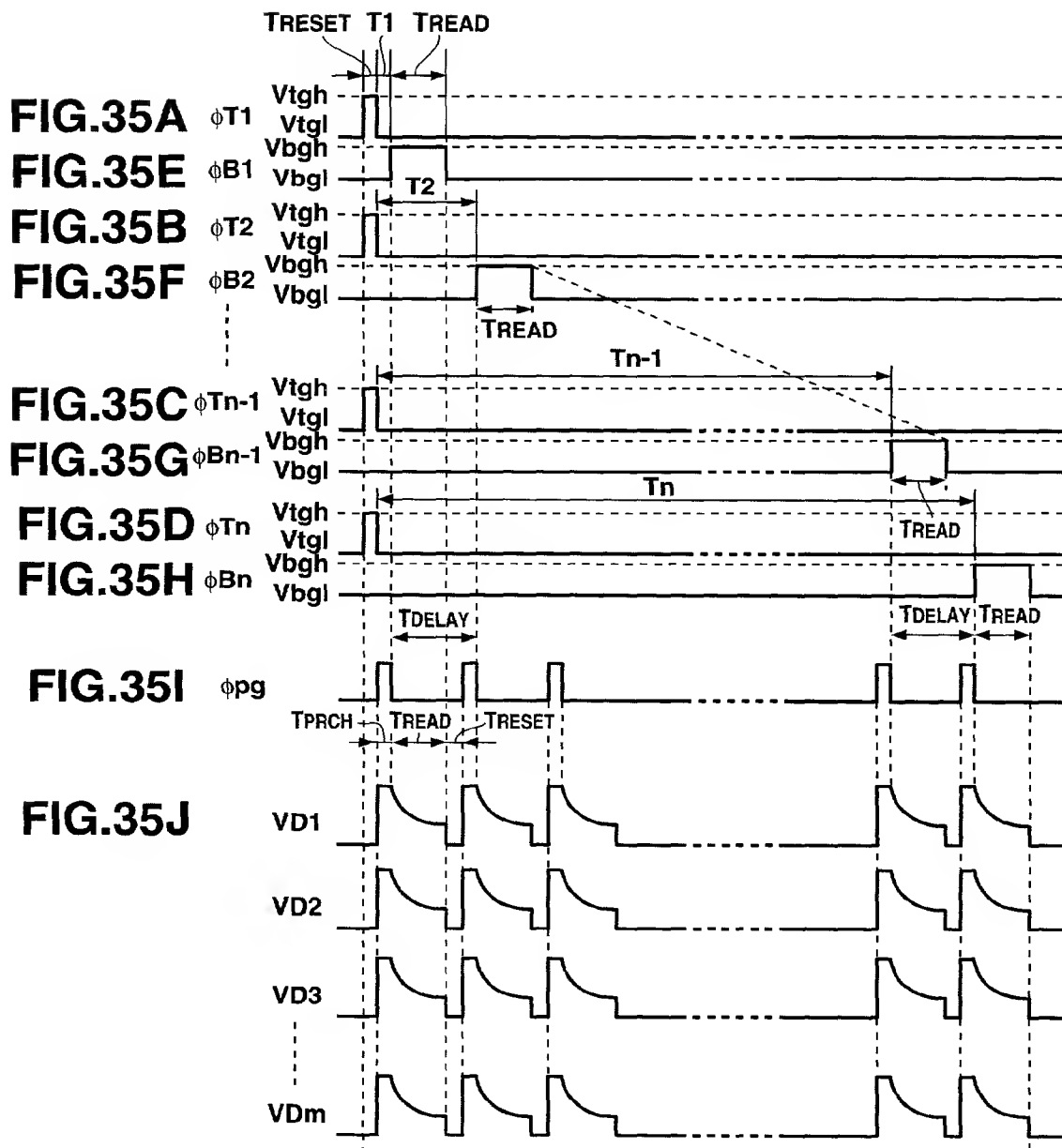


FIG.37A

FIG.37F

FIG.37B

FIG.37G

FIG.37C

FIG.37H

FIG.37D

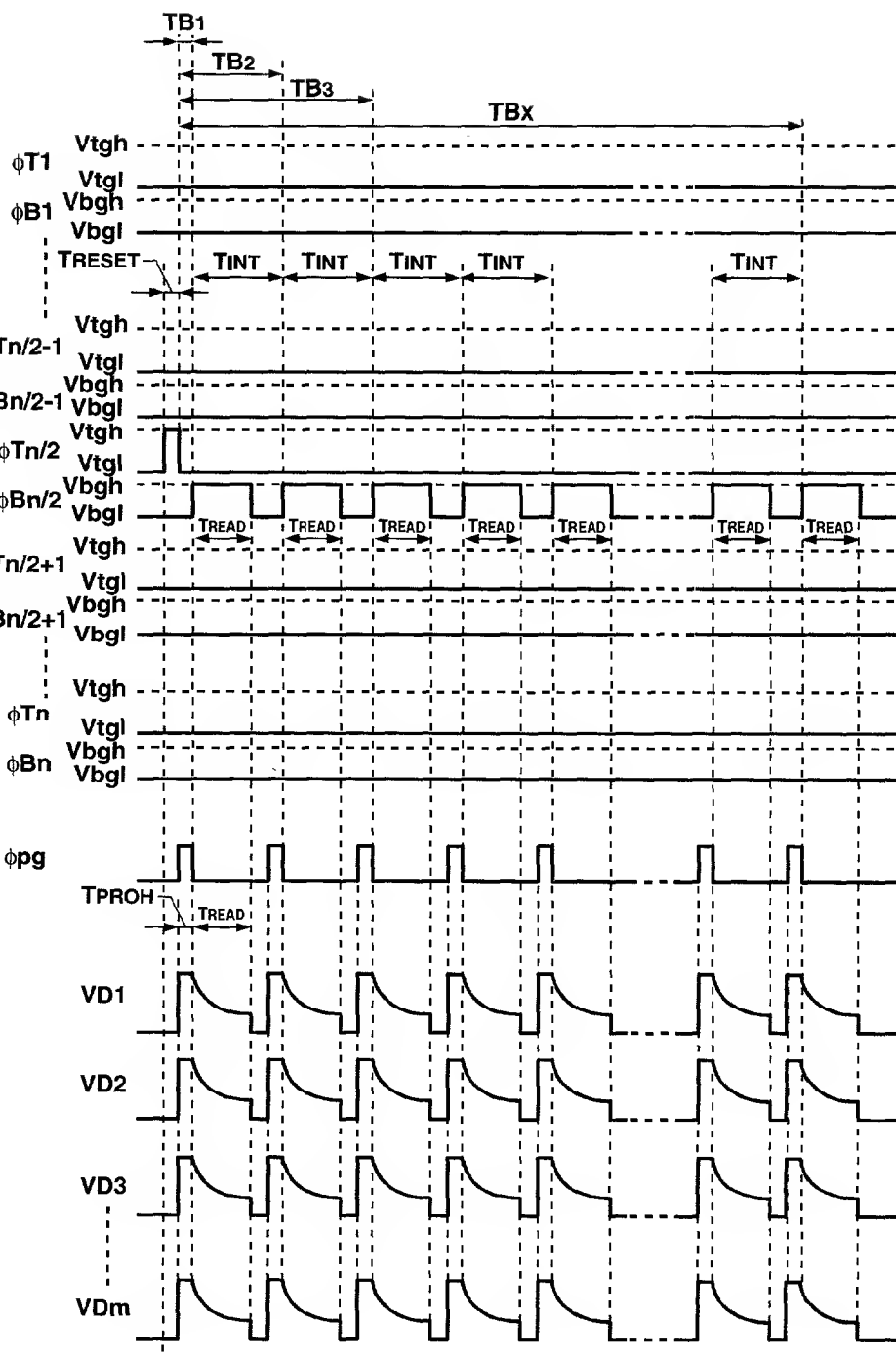
FIG.37I

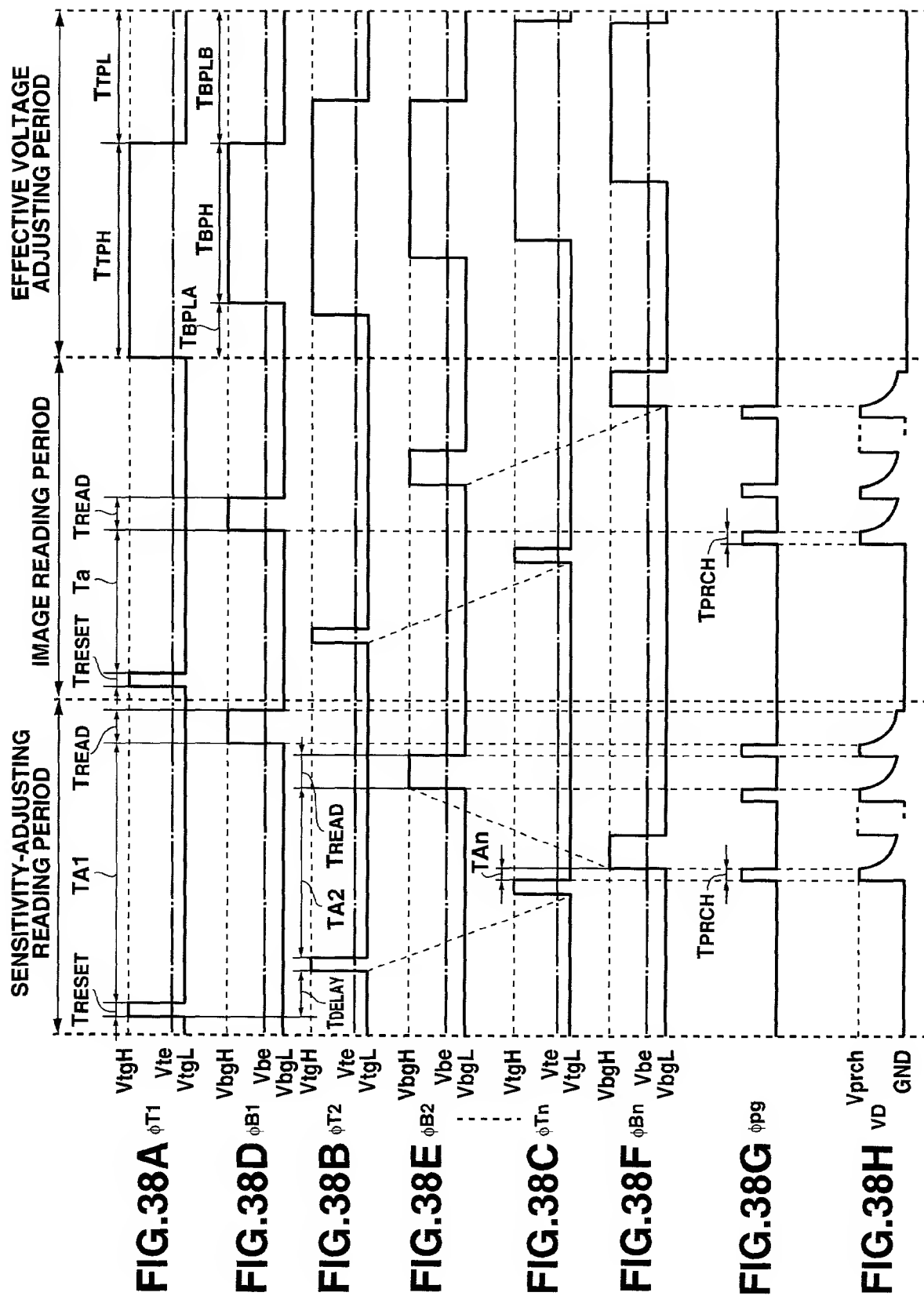
FIG.37E

FIG.37J

FIG.37K

FIG.37L





PRIOR ART

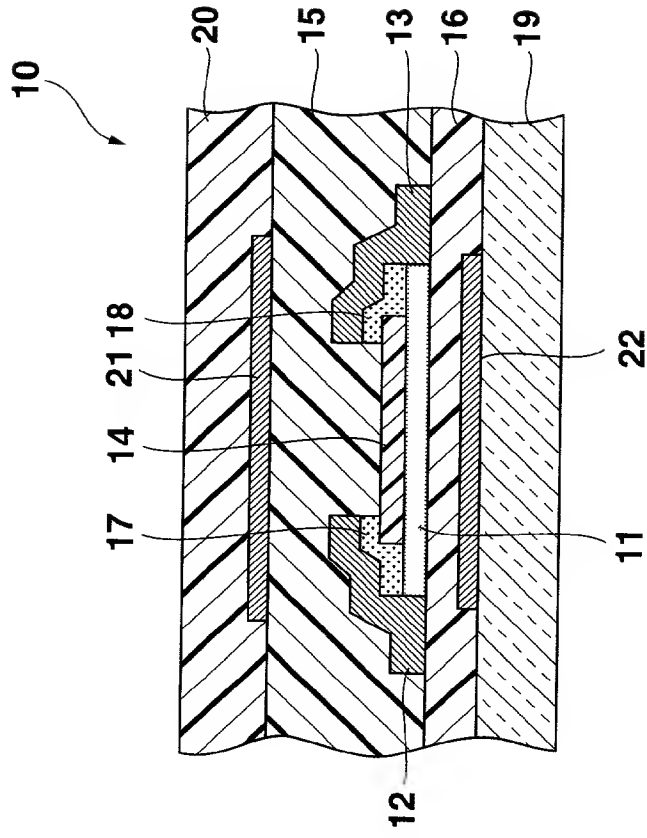


FIG.39A

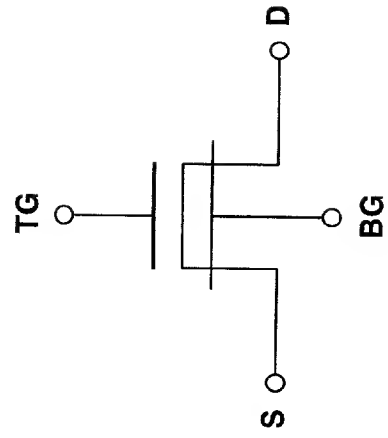


FIG.39B

PRIOR ART

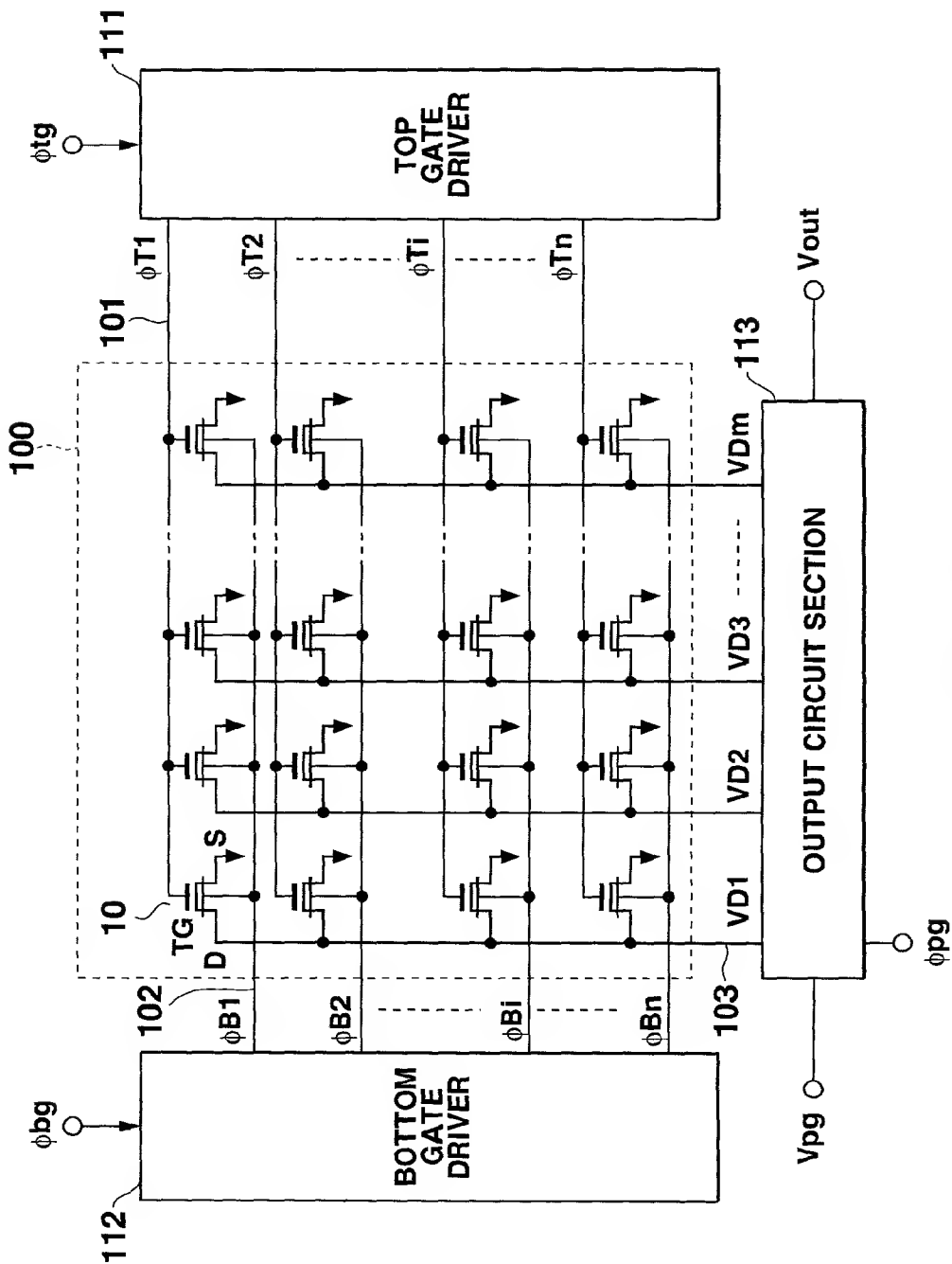


FIG.40

PRIOR ART

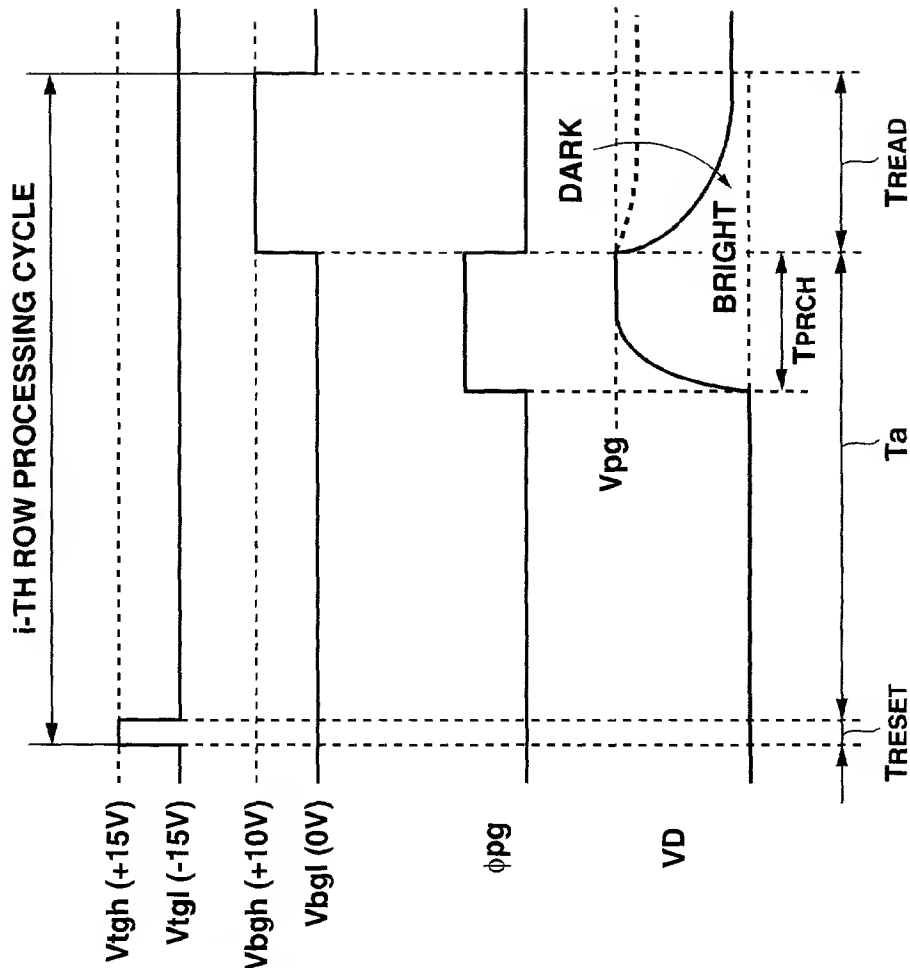


FIG.41A

FIG.41B

FIG.41C

FIG.41D